

35. An isolated nucleic acid according to claim 33, and its complement, wherein the isolated nucleic acid comprises the nucleic acid sequence of SEQ. ID. NO. 28.
36. An isolated nucleic acid according to claim 33, and its complement, wherein the isolated nucleic acid encodes a polypeptide having the amino acid sequence of SEQ. ID. NO. 29.
37. An isolated nucleic acid according to claim 33, and its complement, wherein the isolated nucleic acid comprises nucleotides 21-2531 of the nucleic acid sequence of SEQ. ID. NO. 28.
38. An isolated nucleic acid from cassava, and its complement, wherein the isolated nucleic acid encodes at least an effective portion of a polypeptide having starch branching enzyme Class A (SBEII) activity.
39. An isolated nucleic acid according to claim 38, and its complement, wherein the isolated nucleic acid has at least 88% sequence identity to SEQ ID NO: 28.
40. An isolated nucleic acid according to claim 38, and its complement, wherein the isolated nucleic acid comprises the nucleic acid sequence of SEQ. ID. NO. 28.
41. An isolated nucleic acid according to claim 38, and its complement, wherein the isolated nucleic acid encodes a polypeptide having the amino acid sequence of SEQ. ID. NO. 29.
42. An isolated nucleic acid according to claim 38, and its complement, wherein the isolated nucleic acid comprises nucleotides 21-2531 of the nucleic acid sequence of SEQ. ID. NO. 28.
43. A method of altering the expression of a gene naturally present in a plant host cell, said gene encoding a polypeptide having SBE II activity, the method comprising introducing into the cell the nucleic acid of any one of claims 33-42, operably linked in the sense or anti-sense orientation to a suitable promoter active in the host cell, and causing transcription of the

introduced nucleic acid to produce a transcript, said transcript and/or a translation product thereof being sufficient to interfere with the expression of the gene naturally present in the host cell, thereby altering the expression of the gene.

44. The method of claim 43, further comprising the step of regenerating the altered host cell into a plant or plantlet.

45. A plant or plantlet produced by the method of claim 44.

46. An isolated nucleic acid and its complement, wherein the isolated nucleic acid encodes a polypeptide having starch branching enzyme Class A (SBE II) activity and the amino acid sequence of SEQ. ID. NO. 29.

47. An isolated nucleic acid according to claim 34, further comprising a 5' and/or a 3' untranslated region.

48. A nucleic acid isolated from cassava, wherein the nucleic acid has at least 88% sequence identity with the DNA sequence of SEQ. ID. NO. 28, operably linked in the sense or anti-sense orientation to a promoter operable in plants, said nucleic acid encoding a polypeptide having starch branching enzyme Class A (SBE II) activity.

49. An isolated nucleic acid according to claim 48, comprising at least 300-600 bp.

50. An isolated nucleic acid according to claim 49, comprising a 5' and/or 3' untranslated region.

51. A replicable nucleic acid construct comprising a nucleic acid according to claim 48.

52. A method of altering the expression of a gene naturally present in a plant host cell, said gene encoding a polypeptide having SBE II activity, the method comprising introducing into the

cell a nucleic acid having at least 88% sequence identity with the DNA sequence of SEQ. ID. NO. 28, operably linked in the sense or anti-sense orientation to a suitable promoter active in the host cell, and causing transcription of the introduced nucleotide sequence to produce a transcript, said transcript and/or a translation product thereof being sufficient to interfere with the expression of the gene naturally present in the host cell, thereby altering the expression of the gene.

53. A method according to claim 52, wherein the host cell is selected from the group consisting of a cassava cell, banana cell, potato cell, pea cell, tomato cell, maize cell, wheat cell, barley cell, oat cell, sweet potato cell and rice plant cell.

54. A method according to claim 52, further comprising the introduction of one or more additional nucleic acids, operably linked in the sense or anti-sense orientation to a suitable promoter active in the host cell, and causing transcription of the one or more additional nucleic acids to produce a transcript, said transcript and/or a translation product thereof being sufficient to interfere with the expression of a gene(s) naturally present in the host cell.

55. A method according to claim 54, wherein the one or more additional nucleic acids interfere with the expression of a gene involved in starch biosynthesis.

56. A method according to claim 54, wherein the additional nucleic acid comprises a portion of an SBE I gene effective to interfere with the expression of an SBE I gene naturally present in the host cell.

57. A method according to claim 56, wherein the additional nucleic acid comprises a portion of a cassava SBE I gene effective to interfere with the expression of an SBE I gene naturally present in the host cell.

58. A method according to claim 55, wherein the host cell is selected from the group consisting of cassava cell, banana cell, potato cell, pea cell, tomato cell, maize cell, wheat cell, barley cell, oat cell, sweet potato cell and rice cell.

59. A method according to claim 54, wherein the introduced nucleic acid inhibits expression of the gene naturally present in the host cell and wherein the altered host cell gives rise to starch which contains less branching compared to starch from an unaltered cell.

60. A method according to any one of claims 52-59, further comprising the step of regenerating the altered host cell into a plant or plantlet.

61. A method of obtaining starch having altered properties, comprising regenerating a plant from an altered host cell according to the method of claim 60, and extracting the starch therefrom.

62. A plant or plant cell into which has been artificially introduced a nucleic acid from cassava having at least 88% sequence identity with the DNA sequence of SEQ. ID. NO. 28, operably linked in the sense or anti-sense orientation to a promoter operable in plants, or the progeny thereof, wherein said nucleic acid encodes a polypeptide having starch branching enzyme Class A (SBE II) activity.

63. A plant obtainable by the method of claim 60.

#### **REMARKS**

The Office Action dated May 16, 2002 has been carefully reviewed and the following remarks are made in response thereto. In view of these remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.